ANNALES ZOOLOGICI

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Warszawa, 15 II 1993

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Alexander RADCHENKO

Ants from Vietnam in the collection of the Institute of Zoology, PAS, Warsaw. I. Pseudomyrmicinae, Dorylinae, Ponerinae

[With 7 figures in the text]

Abstract. A list of 31 species of *Pseudomyrmicinae*, *Dorylinae* and *Ponerinae* from Vietnam, including 8 species new for Vietnam. Two new species (*Anochetus mixtus*, *Brachyponera mesoponeroides*) as well as unknown $^{\circ}$ of *Cerapachys sauteri* are described.

Ants were collected by B. PISARSKI and J. PRÓSZYŃSKI in 1959 and by B. PISARSKI and R. BIELAWSKI in 1966 in the following localities of North Vietnam:

 Distr. Nghe An, Phu Quy, 16-17 June, 1959: a dry secondary forest (no. 2151-2160); coffee plantations (no. 2162-2163); a dry sandy river terrace (no. 2161-2168).

2. Thanh Hoa, 19 June, 1959: a village.

- Chiné near Hanoi, Biological Station of the Hanoi University, 22–28 June, 1959: a mountain forest (no. 2171, 2181–2195, 2215–2219); a dry river terrace (no. 2172–2180); grasslands and bushes (no. 2196–2214, 2220–2223).
- Hanoi, 4-5, 14-16, 21-29 May, 1966: gardens and orchards (no. 1-6/66, 54-66/66, 84-123/66).
- 5. Co Loa, 40 km N Hanoi, 6-13 May, 1966: agricultural fields (no. 7-53/66).

6. Yen So, 10 km S Hanoi, 17-20 May, 1966: agricultural fields (no. 67-83/66).

- Distr. Ninh-binh, Cúc-phu'óng, 1-11 June, 1966: a primary tropical forest (no. 124-175/66, 194-207/66); agricultural fields (no. 176-193/66).
- 8. Distr. Hoa-Binh, Thanh ha 12-14 June, 1966: grasslands and bushes (no. 208-231/66).

Measurements and indices of the genera *Cerapachys* F. Smith and *Anochetus* Mayr following Brown (1975, 1976, 1978).

Subfamilia PSEUDOMYRMICINAE

Genus Tetraponera F. SMITH

1. Tetraponera (Sima) rufonigra (JERDON)

120 km NW Vinh, 18 June, 1959; Co Loa, 7 May, 1966; Thanh ha, 12 June, 1966; Phu Qui, 16 June, 1959, \$\forall \tau\$.

Range: S and SE Asia, Java, Sumatra.

2. Tetraponera (Tetraponera) attenuata (F. SMITH)

Phu Quy, 16–17 June, 1959; Cúc-phu'óng, 4 June, 1966, no. 160/66, 5 June, 1966, \$\frac{\pma}{2}\$, \$\frac{\pma}{2}\$.

Range: SE Asia, Java, Sumatra.

3. Tetraponera (Tetraponera) longinoda (FOREL) Cúc-phu'óng, 4–7 June, 1966, no. 193/66; Thanh ha, 12–14 June, 1966, no. 226/66. \$\frac{\pi}{2}\$.

Range: India, Ceylon, Vietnam.

4. Tetraponera (Tetraponera) allaborans (WALKER)

Co Loa, 6–7 May, 1966; Hanoi, 21 May 1966, no. 84/66; Cúc-phu'óng, 7 June, 1966, 99.

Range: S and SE Asia, including Java, Sumatra.

Subfamilia DORYLINAE

Genus Aenictus Schuckard

5. Aenictus laeviceps (F. SMITH)

Cúc-phu'óng, 4-7 June, 1966, no. 193/66,0 \(\frac{\pi}{2} \), \(\delta \delta \).

Range: S and SE Asia to Philippines. New to Vietnam.

6. Aenictus brevicornis (MAYR)

Chiné near Hanoi, 21 June, 1959, 약탁, ♂♂.

Range: Bangala-Desh. New to Vietnam.

Subfamilia PONERINAE

Tribus Cerapachyini

Genus Cerapachys F. SMITH

7. Cerapachys sulcinodis EMERY

Cúc-phu'óng, 5 June, 1966, \$\$.

Range: Himalayas, S China, SE Asia to Philippines. New to Vietnam.

8. Cerapachys sauteri FOREL

Described from Taiwan on workers only; females have been unknown so far.

Material: 1 $^{\circ}$, Cúc-phu'óng, 4 June, 1966, primary tropical forest, leg. R. Bielawski and B. Pisarski.

Female (Figs: 1, 2): HL 1.3, HW 1.1, YL (greatest diameter of eye) 1.25, TrL (trunk length, is measured in profile between the ends of metapleural lobes and pronotum) 2.3 mm; CI 84.6, SI 63.6.

Head elongate, sides parallel, occipital border slightly concave. Antennae with 12 segments, antennal scapes short and thick. Vertex with numerous arched costae, front with horizontal costae (on *C. crawleyi* Wheeler front as well as vertex with horizontal costae).

Trunk, petiole and postpetiole strongly longitudually costate; abdomen behind postpetiole smooth, with numerous separate pilligerous punctures.

Narrowly pectinate spurs on tibial apex of the middle and hind legs: median larger, lateral smaller.

Body black, appendages dark reddish-brown.

Range: Taiwan. New to Vietnam.

Tribus O d o n t o m a c h i t i Genus Odontomachus LATREILLE

- 9. Odontomachus simillimus F. SMITH Chiné near Hanoi, 25 June, 1959, ₹. Range: India to Micronesia and Polynesia.
- 10. Odontomachus silvestrii WHEELER Cúc-phu'óng, 4 June, 1966, ₹. Range: SE China, Vietnam.
- 11. Odontomachus monticola EMERY Cúc-phu'óng, 4–5 June, 1966, ^{‡‡}. Range: China, NE India, SE Asia.

Genus Anochetus MAYR

12. Anochetus graeffei MAYR

Cúc-phu'óng, 7 June, 1966; Hanoi, 25 May, 1966, 44.

Range: S India to Australia and Polynesia.

13. Anochetus mixtus sp. nov.

Worker, holotype (Figs 3, 4, 5): HL 2.0, HW 1.83, ML 1.33, SL 1.75, TrL 3.0 mm; CI 91.3, SI 95.9, MI 72.6 (Vietnam, distr. Ninh-Binh, Cuc-phu'óng, 4 June, 1966, primary tropical forest, leg. R. BIELAWSKI and B. PISARSKI.

Workers, paratypes: HL 1.95–2.13, HW 1.73–1.93, ML 1.25–1.40, SL 1.73–1.88, TrL 2.68–3.0 mm; CI 87.3–92.8, SI 95.9-100.0, MI 72.5–74.6 (based on 5 $^{\ddagger \ddagger}$; 2 of them from the same locality, others from the following regions: Cúc-phu'óg, 3 Jan., 1971, leg. A. Zakharov; 50 km N Thaj-Ngujen, alt. 300 m, forest, 13 Sept., 1962, leg. Kabakov; S China, Jugnnagn, Dadugan, alt. 800 m, 3 May, 1957, leg. D. Panfilov).

Holotype and 2 paratypes in the Institute of Zoology, PAS, Warsaw; 3 paratypes in the Zoological Museum of the Moscow University, Moscow (USSR).

The species belongs to the *rugosus*-group and has mixed features of *A. rugosus* F. Smith (trunk, completely and boldly rugose, except mesopleura) and of *A. muzziolii* Menozzi and *A. princeps* Emery (head smooth, shining, only front and lower part of vertex with striae).

Head longer than broad (CI 87.3-92.8), smooth and shining, striate only in the front and lower part of the vertex. Antennal scapes long (SI 95.9–100.0). Mandibles long (MI 72.5–74.6), their masticatory border with a close series of

coarse denticles.

Pronotum completely and boldly irregularly rugulose; "saddle" area of the truncal dorsum longitudually rugulose; propodeum diagonally rugulose; mesopleural smooth and shining. Scale of petiole smooth and shining, except fine horizontal rugosity in lower third; the shape of petiolar scale shown in Figs 4, 5.

Body and appendages reddish-brown.

Females and males unknown.

Tribus E c t a t o m m i n i Genus Gnamptogenys ROGER

14. Gnamptogenys bicolor (EMERY)

Chiné near Hanoi, 24 June, 1959; Cúc-phu'óng, 4–6 June, 1966, 7 June, 1966, no. 191/66, 44, 44, 45.

Range: SE Asia, Hong Kong.

15. Gnamptogenys costata (EMERY)

Cúc-phu'óng, 4 June, 1966, 보호, (?) ở ở.

Tribus Leptogenys Roger

16. Leptogenys kitteli MAYR

Cúc-phu'óng, 4–11 June, 1966; Thanh ha, 14 June, 1966; Hanoi, 21 May, 1966, \$\forall \tau, \delta \delta.

Range: E Himalayas, SE Asia, Java.

17. Leptogenys diminuta F. SMITH

Chiné near Hanoi, 15 June, 1959, no. 2200; Cúc-phu'óng, 4–5 June, 1966, 44, 3.

Range: S and SE Asia to New Guinea.

18. Leptogenys minchini FOREL

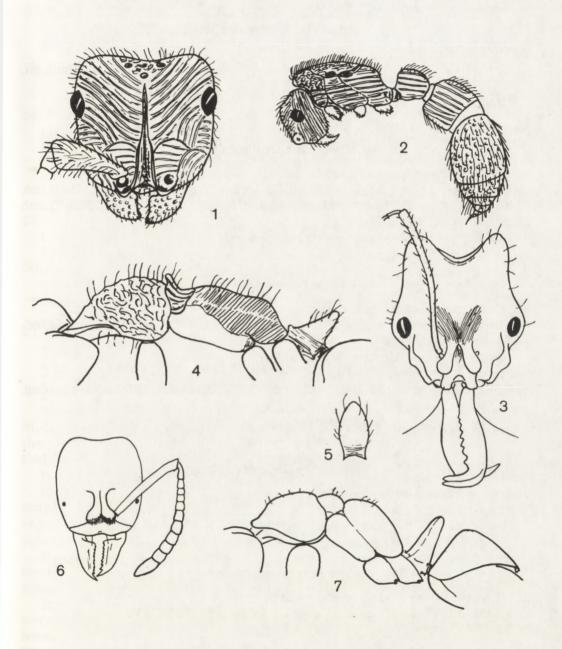
Chiné near Hanoi, 26 June, 1959, no 2208, ₹₹, ♂.

Range: India, Burma. New to Vietnam.

19. Leptogenys lucidula EMERY

Cúc-phu'óng, 10 June, 1959, no. 199/66, \$\$.

Range: Burma. New to Vietnam.



Figs 1–7. Cerapachys sauteri, $\stackrel{\circ}{+}$: 1 – full-face view of a head, 2 – side view of a body; Anochetus mixtus sp. n., $\stackrel{\downarrow}{+}$, holotype: 3 – full-face view of a head, 4 – side view of a trunk and a petiole, 5 – scale of a petiole, frontal view; Brachyponera mesoponeroides sp. n., $\stackrel{\downarrow}{+}$, holotype: 6 – full-face view of a head, 7 – side view of a trunk and a petiole.

Tribus **P o n e r i n i** Genus **Bothroponera** MAYR

20. Bothroponera rufipes JERDON

Chiné near Hanoi, 25 June, 1959; Cúc-phu'óng, 4–7 June, 1966; Thanh ha, 13 June, 1966, \$\frac{4}{2}\$.

Range: S and SE Asia.

Genus Odontoponera MAYR

21. Odontoponera transversa F. Smith

Chiné near Hanoi, 25 May, 1959; Co Loa, 4 May, 1966, 9 May, 1966, no. 28/66; Hanoi, 21 June, 1966, no 84/66; Cúc-phu'óng, 5 June, 1966; Thanh $h\bar{a}$, 12 June, 1966, ξ .

Range: S and SE Asia including Philippines.

Genus Diacamma MAYR

22. Diacamma geometricum F. SMITH

Phu Quy, 16 June, 1959; Hanoi, 3–4 May, 1966, 14–16 May, 1966, no. 54/66, 21 May, 1966, \$\forall \text{?}, \$\delta \delta \delta

Range: Vietnam, Malaya, Java, Sumatra.

23. Diacamma rugosum (LE GUILLE)

Chine near Hanoi, 24 June, 1959, no. 2187, 25 June, 1959; Cúc-phu'óng, 4–7 June, 1966, ₹₹, ♂♂.

Range: SE Asia, Java, Sumatra.

Genus Pseudoponera EMERY

24. Pseudoponera amblyops EMERY

Cúc-phu'óng, 4 June, 1966, \$.

Range: Bangla-Desh, Burma, Java, Sumatra. New to Vietnam.

Genus **Ectomomyrmex** MAYR

25. Ectomomyrmex punctatus KARAWAJEW

Thanh ha, 12 June, 1966; Cúc-phu'óng, 5 June, 1966, 44.

Range: Vietnam.

26. Ectomomyrmex astutus FOREL

Chiné near Hanoi, 26 June, 1959, no. 2195, 2209; Cúc-phu'óng, 4–5 June, 1966, 44.

Range: S and SE Asia, Sumatra, Java.

27. Ectomomyrmex annamitus (E. ANDRÉ)
Hanoi, 21–25 June, 1966, no. 86/66, ¥¥, ♀♀.
Range: Burma, Vietnam.

Genus Trachymesopus EMERY

28. Trachymesopus sharpi FOREL Hanoi, 21 May, 1966, \$\footnote{9}\$. Range: SE Asia.

Genus Brachyponera EMERY

29. Brachyponera luteipes MAYR

Cúc-phu'óng, 4–7 June, 1966, no. 151/66, 158/66, 164/66, 191/66, \$\forall \tilde{\psi}\$. Range: S and SE Asia to Philippines.

30. Brachyponera jerdoni EMERY

Chiné near Hanoi, 25 May, 1959, no. 2169, 25 May, 1959; Cúc-phu'óng, 2 June, 1966, $\mbox{2}$, $\mbox{2}$.

Range: India, Bangla-Desh. New to Vietnam.

31. Brachyponera mesoponeroides sp. nov.

Worker, holotype (Figs 6, 7): HL 0.94, HW 0.81, SL 0.77, TrL 1.4 mm; CI 86.8, SI 105.5 (Vietnam, distr. Ninh Binh, Cúc-phu'óng, 10 June, 1966, no. 207/66, primary tropical forest, nest in a wood stump, leg. R. Вієдамзкі and В. Різарзкі.

Workers, paratypes: HL 0.86–0.95, HW 0.76–0.83 (across the widest part), SL 0.73–0.77, TrL 1.3–1.4 mm; CI 86–88, SI 95–100 (based on 8 ‡ ; 2 ‡ from the same nest; 3 ‡ , ibid., 10 June, 1966, no. 199/66, nest under a log; 1 ‡ , ibid., no. 200/66, under a log).

Holotype and 8 paratypes in the Institute of Zoology PAS Warsaw.

Head slightly elongate, sides prominent, occipital border concave. Antennal scapes surpassing occipital border by 1.5–2 of its diameter; 3–5 of funicular segments broader than long, the following segments (except the apical) are subsquare. Eyes small with 12–14 facets.

Masticatory border of mandibles very long, 2–3 time longer than on inner border; denticles (except the apical and preapical) small or faint. Mandibles smooth and shining, head mat, finely and densely punctured.

Trunk with a deep masopropodeal impression; horizontal surface of propodeum shorter than back one. Scale of petiole (in profile) thin, not widened at the base, with frontal and back surfaces nearly parallel. Trunk shining with very fine punctures.

Gastric tergites submat, with abundant pilosity.

Body dark reddish-brown, appendages and mandibles yellowish-brown.

Similar to *B. atrata* KARAWAJEW; from which differs by small eyes, short antennal segments, shape of propodeum and scale of petiole.

Females and males unknown.

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Institute of Zoology, Ac. Sci. Ukr. SSR Lenin Ave. 15, 252601, Kiev-30 (USSR)

STRESZCZENIE

[Tytuł: Mrówki z Wetnamu w zbiorach Instytutu Zoologii PAN w Warszawie. I. Podrodziny: *Pseudomyrmicinae*, *Dorylinae*, *Ponerinae*]

Zbiór mrówek z Wietnamu z podrodzin Pseudomyrmicinae, Dorylinae i Ponerinae, znajdujący się w Instytucie Zoologii PAN w Warszawie liczy 31 gatunków. Osiem gatunków wykazano z Wietnamu po raz pierwszy. Dwa gatunki, Anochetus mixtus i Brachyponera mesoponeroides, opisano jako nowe. Podano też pierwszy opis samicy Cerapachys sauteri FOREL.



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